REMARKS

Favorable reconsideration of this application is respectfully requested.

Initially, applicant again notes the prior Office Action of February 8, 2007 indicates the Information Disclosure Statement (IDS) filed March 29, 2006 is proper and has been entered. Applicant gratefully acknowledges that indication. However, applicant requests the record be made more clear by returning to applicant the filed form PTO-1449 with the references initialed. Applicant submitted the IDS on a form PTO-1449, which at this time has not been returned to applicant with the references initialed confirming their consideration. Applicant respectfully again requests that confirmation of consideration.

Claims 1-9, 11-20, 23, and 24 are pending in this application. Claim 11 was rejected under 35 U.S.C. § 112, second paragraph. Claims 1, 4, 8, 11-12, 15, 19, and 23-24 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. patent 6,859,832 to Gecht et al. (herein "Gecht") in view of U.S. patent 5,768,483 to Maniwa et al. (herein "Maniwa"). Claims 2-3 and 13-14 were rejected under 35 U.S.C. §103(a) as unpatentable over Gecht, in view of Maniwa, in view of U.S. patent 6,424,429 to Takahashi et al. (herein "Takahashi"), and in view of U.S. patent 6,535,716 to Reichman et al. (herein "Reichman"). Claims 2-3 and 13-14 were rejected under 35 U.S.C. §103(a) as unpatentable over Gecht, in view of Maniwa, in view of U.S. patent publication 2002/0059176 to Fujisawa, and in view of Reichman. Claims 5 and 16 were rejected under 35 U.S.C. §103(a) as unpatentable over Gecht in view of Maniwa. Claims 6-7 and 17-18 were rejected under 35 U.S.C. §103(a) as unpatentable over Gecht, in view of Maniwa, in view of U.S. patent application publication 2001/0056485 to Barrett, Jr. et al. (herein "Barrett"). Claim 9 was rejected under 35 U.S.C. §103(a) as unpatentable over Gecht, in view of Maniwa, in view of U.S. patent application publication publication 2002/0194307 to Anderson et al. (herein "Anderson").

With respect to the claims as written, applicant notes the claims are amended to no longer recite any "means plus function" terminology. Those claim amendments are not believed to narrow the claims in any aspect.

Addressing first the rejection of claim 11 under 35 U.S.C. § 112, second paragraph, that rejection is traversed by the present response.

Claim 11 was noted as unclear whether it was directed to claiming the computer program at the management device or the computer program performing specific functions of the management device. In reply to that rejection claim 11 is amended to clarify the features therein are directed to a computer program at the management device. The amendment to claim 11 is believed to address the objection thereto under 35 U.S.C. § 112, second paragraph.

Addressing now the above-noted prior art rejections, those rejections are traversed by the present response.

Independent claim 1 recites the process performed by the processor includes:

... to send a test signal to a hardware resource of an image forming apparatus to obtain data indicating a usage state of the image forming apparatus in a local area, the data indicating the usage state including information in response to the test signal from the hardware resource[.]

The other independent claims recite similar features. Such claim features are noted in the present specification for example at page 47, line 16 to page 48, line 21. As discussed in that portion in the present specification, with the claimed invention a command may be received by a management mediating device that requests information of a hardware resource. In response to that command a processing unit sends a test signal to the hardware resource, which acts in accordance with the test signal and provides a response including information addressing the test signal from the hardware resource.

With respect to the above-noted feature the outstanding rejection cites Maniwa.

Applicant respectfully submits the above-noted feature, however, clearly distinguishes over the applied disclosure in <u>Maniwa</u>.

In addressing the above-noted feature the outstanding rejection states:

As per claim 1, 11 - 12 and 23 - 24, Applicant asserts prior-arts does not teach "sending a test signal to a hardware resource of an image forming apparatus" and in response providing "data indicating a usage state including information in response to the test signal from the hardware resource" (Remarks: Page 14 / 2nd – 3rd Para). Examiner respectfully disagrees because (a) a printer /scanner controller is considered as an image forming apparatus and a printer /scanner device is considered as a hardware resource (b) Maniwa teaches a command / response interface (i.e. Interface B) between the printer /scanner controller and the printer / scanner device (Maniwa: Column 6 Line 45 – 48 and Figure 1 / Interface B) (c) the command / response includes instructing an operation of the printer /scanner and checking the state thereof such as completion or suspension of the printer job (Maniwa: Column 6 Line 45 - 48 and Column 3 Line 18 - 20) (d) Examiner notes the command is interpreted as the "test signal" and the status of completion or suspension of the printer job as presented by the printer /scanner device is interpreted as the "usage state including information in response to the test signal" to meet the claim language - This is also consistent with the disclosure of the instant specification that indicates (e) the processing unit sends a "command" as a "test signal" and this test signal (i.e. command) is input to the hardware resource (i.e. printer / scanner) (SPEC: Page 48 / Line 2 – 4: the processing unit 102 sends this command as a test signal to the engine interface 103 and this test signal is input to the hardware resource 163) (f) the response of the test signal (i.e. the response of the command) can include, for example, a status of the processed command (normally processed or abnormally processed) (SPEC: Page 48 / Line 16 - 21: Examiner notes a completion of the printer job, as taught by Maniwa (see above), can be considered as a status of "normally processed" while a suspension of the printer job can be considered as a status of "abnormally processed"). Therefore, Maniwa does teach "sending a test signal to a hardware resource of an image forming apparatus" and in response providing "data indicating a usage state including information in response to the test signal from the hardware resource" and as such Applicant's arguments are respectfully traversed. [Original Emphasis].

In reply to above grounds for the rejection, applicant respectfully submits the outstanding rejection is misconstruing the disclosure in <u>Maniwa</u> relative to the claimed features.

Maniwa merely discloses that, upon completion of a print job, a state notification is transferred to a server machine. Maniwa does not disclose or suggest, in contrast to features recited in the claims, providing a test signal to a hardware resource in response to a command generated from a management system outside a fire wall, and in response providing "data indicating a usage state including information in response to the test signal from the hardware resource".

In contrast to Maniwa, according to the claimed invention, at timings defined by a schedule, a connection is made to a server through a fire wall, and a request is received from the server that can include command information requesting a test of a hardware resource. Such a test signal for example can provide maintenance management information for maintenance management of the hardware resource. In the claimed invention a response from the hardware resource to the test signal is transferred to the server.

Maniwa is not directed to providing such information, but again as noted above the system of Maniwa merely provides a state notification upon completion of a print job.

Maniwa does not provide any command from a management system outside a fire wall that would result in a test signal being provided to a hardware resource including a result of that test signal.

Moreover, applicant notes the outstanding rejection is citing disclosures in <u>Maniwa</u> to generate a command that is only internal to a digital copier system. The claims, in contrast to <u>Maniwa</u>, are directed to a command received from a management system "outside a fire wall". That is, and with reference to Figure 16 in the present specification as one non-limiting example, in the claims the management system 70 is *outside a fire wall* 120 from an

image processing apparatus 31, and the command generated from the management system 70 passes through the fire wall 120.

The above-cited arguments in the Office Action applying Maniwa against the claims appears to cite Maniwa to disclose the scanner/printer controller 107 as corresponding to the claimed management system as the Office Action notes the scanner/printer controller 107 in Maniwa generates a command passed to the interface B, which then goes to the copier controller 112. The Office Action thus appears to cite that copier controller 112 as the hardware resource as it is also connected to the interface B.

However, that grounds for rejection is not related to the claimed features as in the claimed features the command is received from a management system that is *outside* a fire wall relative to a processor. Clearly in <u>Maniwa</u> each of the scanner/printer controller 107, the interface B, and the copier controller 112 are all *internal* to the digital copier system 102.

Maniwa does not disclose or suggest in that respect a management system that is outside a fire wall and that provides a command to send a test signal to a hardware resource through the fire wall.

The outstanding Office Action indicates <u>Gecht</u> discloses a fire wall device, but <u>Gecht</u> does not disclose or suggest any device generating the claimed command, and the outstanding rejection relies on <u>Maniwa</u> to teach the command generating device. In that way, if <u>Maniwa</u> was combined with the teachings in <u>Gecht</u>, that would at most result in an *internal* digital copier system including devices such as the scanner/printer controller 107, interface B, and copier controller 112 in <u>Maniwa</u>, and even with such a modification to <u>Gecht</u> no management system device outside of a fire wall would generate a command resulting in sending a test signal to a hardware resource of an image forming apparatus.

Thereby, <u>Maniwa</u> is not at all directed to a device even similar to the claimed features as the cited disclosure in <u>Maniwa</u> merely indicates a digital copier system internally

generating commands, and Maniwa is not even relevant to a claimed system as claimed in which a management system outside of a fire wall generates a command, in response to which a processor sends a test signal to a hardware resource.

Applicant also notes the above-noted grounds for rejection appears to indicate the disclosure in Maniwa is consistent with the disclosure in the present specification, for example at page 48, line 2 et seq.

Applicant submits the outstanding Office Action in that respect is misconstruing applicant's specification. Again as shown for example in Figure 16 in the present specification, the management system 70 that generates the command is *outside* of a fire wall 120 relative to an image processing apparatus 131. That is a contrary structure to the cited disclosure in Maniwa, which discloses a scanner/printer controller 107, interface B, and copier controller 112 all *internal* to a digital copier system. In that respect the disclosure in Maniwa is *not* consistent with the disclosure in the present specification.

In view of the foregoing comments, applicant respectfully submits that the claims as written clearly distinguish over <u>Gecht</u> in view of <u>Maniwa</u>.

Moreover, no disclosures in any of the further secondary cited references are believed to cure the above-noted deficiencies of <u>Gecht</u> in view of <u>Maniwa</u>.

In view of the present response, applicant respectfully submits that the claims as written distinguish over the applied art.

Application No. 10/667,306 Reply to Office Action of July 18, 2007

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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